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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/689,681	10/13/2000	Ville Eerola	PM	7632
7590	03/03/2004		274423/2990994US/A/kop	
Kimberley G Nobles IRELL & MANELLA LLP Suite 400 840 Newport Center Drive Newport Beach, CA 92660			EXAMINER PHU, PHUONG M	
			ART UNIT	PAPER NUMBER
			2631	10
DATE MAILED: 03/03/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/689,681

Applicant(s)

EEROLA ET AL.

Examiner

Phuong Phu

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4.9</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Drawings*

2. Figures 1A, 1B, 2A, 2B, 2C, 2D and 2F should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 2, 6, 8, 10 and 11 recites the limitations "the signal" (see lines 4, 6 and 8 of claim 1; line 3 of claim 2, lines 12, 18 of claim 6; lines 10, 12 and 14 of claim 8; lines 17, 19 and 22 of claim 10; and line 3 of claim 11). These limitations are lack of antecedent basis.

Claim 3 recites the limitation "the first and the second decimation means. This limitation is lack of antecedent basis.

Claim 4 recites the limitation "the generation means" on line 6. This limitation is lack of antecedent basis.

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Claims (if any), dependent on the above claims, therefore are also rejected.

5. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

Claim 3 claims “the first and the second decimation means are implemented with ‘integrated and dump’ type of filters”. Claim 3 does not provide structures, interconnection/interrelationship and/or operations of “filters” in order to be indicated as ‘integrated and dump’ type.

Claim 3 does not provide interconnection/interrelationship between components “first decimation means”, “second decimation means” and “filters” with each other or with other components, recited in claim 1, in order to indicate the claimed invention as a complete operative device.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5 and 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Janc et al (4,785,463).

As per claims 1 and 8, see figures 1, 3, 7 and 8, and col. 5, line 12 to col. 6, line 10, col. 7, lines 38-66, col. 15, line 38 to col. 17, line 14, Janc et al discloses a system, as claimed, wherein the system comprising:

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Rf means (104) (see figure 1) for filtering and mixing a received signal to an IF;  
a code mixer (332, 334) for code demodulation of a signal (I, Q) by means of a local spreading code replica (C/A code) (see figure 3);  
a carrier mixer (802), following said code mixer, for carrier demodulation of the signal by means of a local carrier replica ( $\cos \theta$ ,  $\sin \theta$ ) (see figure 8); and  
first means (322, 324), arranged between said code mixer and said carrier mixer, for lower the sampling frequency of the signal (see figure 3).

As per claims 2 and 9, Janc et al discloses second means (804, 806, 808, 810), arranged after said carrier mixer, for lowering the sampling of the signal to 50 bit/sec (see figure 8, and col. 16, lines 63-66).

As per claim 3, Janc et al discloses that said first means and said second means are implemented with filters (see figures 3 and 8).

As per claim 4, Janc et al discloses a code generator (330) (see figure 3) for generating the local spreading code replica; a frequency generator (390) (see figure 3) for controlling the code generator; and a code tracking means (C/A CODE CONTROL) (see figure 8) for controlling the code generator based on an output of the carrier mixer.

As per claim 5, Janc et al discloses a frequency generator (846) for generating the local carrier replica; carrier tracking means (842, 844, 882) for controlling the frequency generator based on an output of the carrier mixer, (see figure 8).

***Allowable Subject Matter***

8. Claims 6, 7, 10 and 11 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

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***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 703-308-0158. The examiner can normally be reached on M-F (8:30-6:00) First Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 703-306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Phuong Phu*

Phuong Phu  
02/10/04

Phuong Phu  
Primary Examiner  
Art Unit 2631

**PHOUNG PHU  
PRIMARY EXAMINER**